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Customer Journey Mapping in the Age of E-commerce: Insights from Millennials in South-East Nigeria

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Abstract

This study investigates the impact of customer journey mapping on e-commerce behaviors among millennials in Southeast Nigeria. Focusing on four key dimensions: website usability, trust in digital payment systems, mobile responsiveness, and post-purchase support—the research examines how these factors influence purchase decisions, customer satisfaction, retention, and loyalty. Data were collected via questionnaires distributed to millennials in select federal and state universities across Anambra, Enugu, and Imo states, achieving a 62% response rate. Using statistical analysis, the study found significant positive relationships between each journey element and corresponding consumer outcomes, underscoring the importance of a seamless, secure, and responsive digital shopping experience. The findings offer practical insights for e-commerce businesses seeking to enhance millennial engagement and competitiveness in Nigeria's growing online market. The study recommended that there should be improving website design, strengthening payment security, optimizing mobile platforms, and enhancing post-purchase services. This research contributes to the understanding of digital consumer behavior in developing economies and supports strategies for effective customer journey management.

Keywords: Customer journey mapping, e-commerce, millennials, website usability, digital payment trust, mobile responsiveness, post-purchase support.

1. INTRODUCTION

The rapid growth of e-commerce globally has fundamentally reshaped how consumers interact with brands, products, and services. As digital platforms proliferate, understanding the customer journey—the complete experience a customer has with a brand from initial awareness to post-purchase behavior—has become central to optimizing customer satisfaction and business success (Lemon & Verhoef, 2016). In this digital age, customer journey mapping (CJM) provides businesses with a visual representation of the customer's experience across different digital and physical touchpoints, thereby enabling a more personalized, responsive, and seamless service experience (Richardson, 2010; Edelman & Singer, 2015).

Millennials, defined as individuals born between 1981 and 1996, are particularly important in the digital commerce landscape. They are digitally native, socially connected, and mobile-driven, making them a dominant force in shaping e-commerce trends (Smith, 2022). In Nigeria, and specifically in the South-East region, millennials are increasingly engaging in online shopping due to growing internet penetration, smartphone adoption, and mobile payment platforms (KPMG, 2021). However, despite this growth, businesses often lack a nuanced understanding of how millennials in this region navigate the digital purchase journey—from search and evaluation to conversion and advocacy. This gap hinders the ability of businesses to create tailored digital strategies that foster customer loyalty and satisfaction.

Furthermore, challenges such as trust in digital payment systems, ease of navigation, website responsiveness, and after-sales service remain critical pain points in the e-commerce experience in developing regions (Adeniran & Johnston, 2020). Mapping the

customer journey of South-East Nigerian millennials offers a strategic opportunity to identify these pain points and improve customer engagement and retention strategies. While existing studies have examined e-commerce adoption broadly in Nigeria, there is a paucity of research focusing on customer journey mapping from the consumer's perspective, particularly among digital-savvy millennials in the South-East geopolitical zone. This study, therefore, seeks to empirically investigate the customer journey stages and experiences of millennials in South-East Nigeria within the e-commerce space, with the aim of generating actionable insights for marketers and platform developers.

1.1 Research Hypotheses

$H0_1$: There is a significant relationship between website usability and millennials' purchase decision in e-commerce platforms.

$H0_2$: Trust in digital payment systems positively influences customer retention among millennial e-commerce users.

H3: Mobile responsiveness of e-commerce platforms significantly affects customer satisfaction among millennials.

H4: Post-purchase support services have a significant impact on customer loyalty among millennials in South-East Nigeria.

2. LITERATURE REVIEW

Conceptualizing Customer Journey Mapping (CJM)

Customer Journey Mapping (CJM) is a strategic tool that visualizes the end-to-end experience of customers as they interact with a brand across various touchpoints. It aids organizations in identifying pain points, optimizing processes, and enhancing customer satisfaction (Richardson, 2010). CJM encompasses stages such as awareness, consideration, purchase, retention, and advocacy, providing insights into customer behaviors and expectations (Lemon & Verhoef, 2016). In the digital era, CJM has evolved

to incorporate online interactions, recognizing the significance of digital touchpoints in shaping customer experiences. This evolution necessitates a comprehensive understanding of both online and offline customer interactions to deliver seamless experiences (Edelman & Singer, 2015).

E-Commerce Landscape in Nigeria

Nigeria's e-commerce sector has witnessed significant growth, driven by factors such as increased internet penetration, smartphone adoption, and a youthful, tech-savvy population. As of 2021, internet penetration stood at 51%, with over 100 million users, facilitating the expansion of online shopping platforms (SME Guide, 2021). The proliferation of affordable smartphones has further democratized access to e-commerce, enabling a broader segment of the population to engage in online transactions (Kashgain, 2023). The youthful demographic, with a median age of 18.1 years, exhibits a natural inclination towards digital solutions, making them a pivotal force in the e-commerce landscape (SME Guide, 2021). This demographic's preference for convenience, variety, and competitive pricing has fueled the adoption of online shopping platforms. However, challenges persist, including low consumer trust, logistical constraints, high customer acquisition costs, and underdeveloped digital payment infrastructure. Concerns over online fraud, unreliable delivery systems, and limited payment options hinder the full realization of e-commerce potential in Nigeria (Marketing Edge, 2022).

Millennials and E-Commerce in Nigeria

Millennials, defined as individuals born between 1981 and 1996, represent a significant segment of Nigeria's population and are key drivers of e-commerce growth. Their digital nativity, coupled with increasing purchasing power, positions them as influential consumers in the online marketplace (Smith, 2022). The demographic exhibits distinct online shopping behaviors, characterized by a preference for mobile commerce, reliance on peer reviews, and demand for personalized experiences. The integration of social media

into their shopping journey underscores the importance of omnichannel strategies in engaging this cohort (Automatic Pallet, 2023). Despite their digital proficiency, millennials in Nigeria face challenges such as mistrust in online transactions, concerns over data privacy, and inconsistent service quality. Addressing these issues is crucial for businesses aiming to capture and retain this valuable customer segment.

Digital Payment Systems and Trust

The adoption of digital payment systems in Nigeria has been instrumental in facilitating e-commerce transactions. Platforms like Paystack and Flutterwave have introduced secure and convenient payment solutions, enhancing consumer confidence in online shopping (Kashgain, 2023). These systems offer various payment options, including card payments, bank transfers, and mobile wallets, catering to diverse consumer preferences. However, trust remains a critical factor influencing the adoption of digital payments. Concerns over online fraud, data breaches, and transaction failures deter some consumers from fully embracing digital payment methods (Marketing Edge, 2022). Building robust security frameworks and educating consumers on safe online practices are essential steps in fostering trust and encouraging the use of digital payment systems.

Mobile Responsiveness and User Experience

The prevalence of mobile internet usage in Nigeria necessitates that e-commerce platforms prioritize mobile responsiveness to enhance user experience. With over 90% of internet users accessing the web via mobile devices, optimizing websites and applications for mobile interfaces is imperative (Novatia Consulting, 2023). A seamless mobile experience encompasses fast loading times, intuitive navigation, and secure payment processes. Failure to deliver a user-friendly mobile interface can result in high bounce rates and lost sales opportunities. Therefore, businesses must invest in responsive design and continuous user experience testing to meet the expectations of mobile-first consumers.

Post-Purchase Support and Customer Loyalty

Post-purchase support plays a vital role in shaping customer perceptions and fostering loyalty. Efficient delivery systems, responsive customer service, and hassle-free return policies contribute to positive customer experiences and repeat purchases (ThisDayLive, 2024). Companies like Jumia have implemented comprehensive logistics networks and customer support services to address post-purchase concerns, thereby enhancing customer satisfaction and loyalty. Such initiatives underscore the importance of end-to-end service excellence in the competitive e-commerce landscape.

Customer Journey Mapping in the Nigerian Context

Applying CJM in the Nigerian e-commerce context requires an understanding of local consumer behaviors, preferences, and challenges. Factors such as cultural nuances, infrastructural limitations, and economic disparities influence the customer journey and must be considered in mapping exercises (Okeke et al., 2024). For instance, the preference for cash-on-delivery options, driven by trust issues and limited access to digital payment systems, affects the purchase and post-purchase stages of the journey. Additionally, logistical challenges in rural areas impact delivery timelines and customer satisfaction. Therefore, CJM in Nigeria must account for these unique factors to effectively enhance customer experiences.

Theoretical Frameworks in E-Commerce Adoption

Several theoretical models have been employed to understand e-commerce adoption, including the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT). These models highlight factors such as perceived usefulness, ease of use, social influence, and facilitating conditions as determinants of technology adoption (Davis, 1989; Venkatesh et al., 2003) In the Nigerian context, studies have identified trust, perceived risk, and cultural factors as additional

influencers of e-commerce adoption (Ezennia & Marimuthu, 2022). Integrating these variables into existing models can provide a more comprehensive understanding of consumer behaviors in Nigeria's e-commerce sector.

EMPIRICAL REVIEW

Website Usability and Millennials' Purchase Decisions

Website usability is a critical determinant of online purchase decisions, especially among millennials who prioritize seamless digital experiences. In Nigeria, Abraham et al. (2021) conducted a usability evaluation of prominent e-commerce websites and identified significant issues related to navigation, information architecture, and user interface design. These usability challenges were found to impede users' ability to complete transactions efficiently, thereby affecting purchase decisions. Further supporting this, Ighomereho et al. (2022) proposed an e-service quality model comprising dimensions such as website appearance, ease of use, reliability, and responsiveness. Their study, involving 318 e-channel users in Lagos State, Nigeria, revealed that ease of use and reliability significantly influence overall e-service quality, which in turn affects customer satisfaction and purchase intentions. Additionally, the Webreep model, as discussed by Coker and Leong (2011), emphasizes navigation and content quality as pivotal factors influencing website satisfaction and loyalty. Given that millennials are digitally native and value intuitive interfaces, e-commerce platforms targeting this demographic must prioritize usability to enhance purchase decisions.

Trust in Digital Payment Systems and Customer Retention

Trust in digital payment systems is paramount for customer retention in e-commerce. Ojochide et al. (2023) examined the impact of e-service quality on customer loyalty in South West Nigeria and found that privacy and security concerns significantly affect customer trust and loyalty. Their survey of 385 customers indicated that responsiveness

and privacy are critical components of e-service quality that influence repeat purchases and customer retention. Complementing this, the study by Ajao et al. (2023) on mobile payment acceptance in Nigeria highlighted trust as a key driver of mobile payment adoption. Their findings suggest that enhancing trust in digital payment systems can lead to increased usage and customer retention in the e-commerce sector. Furthermore, the research by Adeoti and Oshotimehin (2020) emphasized that trust, convenience, and security are significant determinants of e-payment adoption in Nigeria. Their study revealed that these factors influence consumers' purchase decisions and spending growth, underscoring the importance of building trust in digital payment systems for customer retention.

Mobile Responsiveness and Customer Satisfaction

Mobile responsiveness is increasingly vital for customer satisfaction, given the high mobile internet penetration in Nigeria. Ighomereho et al. (2022) identified mobile responsiveness as a key dimension of e-service quality that affects user satisfaction. Their study indicated that websites optimized for mobile devices enhance user experience, leading to higher customer satisfaction levels. Additionally, the research by Ojochide et al. (2023) found that fulfillment and responsiveness are significant predictors of customer satisfaction and loyalty in the e-commerce market. Their findings suggest that mobile-responsive websites that ensure quick load times and easy navigation contribute to improved customer satisfaction. Moreover, the study by Ighomereho et al. (2022) emphasized that ease of use and reliability, which are enhanced by mobile responsiveness, are crucial for overall e-service quality and customer satisfaction. Given that millennials predominantly use mobile devices for online shopping, ensuring mobile responsiveness is essential for satisfying this demographic.

Post-Purchase Support Services and Customer Loyalty

Post-purchase support services significantly influence customer loyalty in e-commerce. Etuk et al. (2024) investigated the role of e-service responsiveness in customer loyalty among online shoppers in Nigeria. Their study revealed that responsiveness, including effective post-purchase support, positively affects customer loyalty, with age and education moderating this relationship. Similarly, Ojochide et al. (2023) found that compensation and fulfillment, aspects of post-purchase support, are significant predictors of customer satisfaction and loyalty. Their research indicated that addressing customer complaints promptly and effectively enhances customer loyalty in the e-commerce sector. Furthermore, the concept of the service recovery paradox, as discussed by McCollough et al. (2000), suggests that effective resolution of service failures can lead to higher customer satisfaction and loyalty than if no failure had occurred. This underscores the importance of robust post-purchase support services in fostering customer loyalty.

Research Gaps and Future Directions

While existing literature provides insights into various aspects of e-commerce in Nigeria, there is a paucity of research focusing specifically on CJM among millennials in the South-East region. Understanding the unique experiences and challenges faced by this demographic can inform targeted strategies to enhance customer satisfaction and loyalty. Future research should explore the interplay between digital literacy, cultural factors, and technological infrastructure in shaping the customer journey. Additionally, longitudinal studies examining changes in consumer behaviors over time can offer valuable perspectives for businesses aiming to adapt to evolving market dynamics.

3. METHODOLOGY

This study employed a quantitative research design with a cross-sectional survey approach to examine how key elements of customer journey mapping affect millennials' e-commerce

behaviors in Southeast Nigeria. This design is appropriate for measuring variables and testing hypotheses through statistical analysis, enabling generalization of findings within the target population.

Population

The population for this study consists of millennials aged 25 to 40 years enrolled in selected universities across Southeast Nigeria. Specifically, one federal university and one state university were purposively selected from each of the three states: Anambra, Enugu, and Imo. The institutions include:

- **Anambra State**: Nnamdi Azikiwe University (Federal) and Chukwuemeka Odumegwu Ojukwu University (State)
- **Enugu State**: University of Nigeria, Nsukka (Federal) and Enugu State University of Science and Technology (State)
- **Imo State**: Federal University of Technology Owerri (Federal) and Imo State University (State)

This selection ensures representation of diverse educational settings and captures a broad segment of the millennial student population in the region.

Sample Size and Sampling Procedure

Using Taro Yamane's formula (1967) with a 95% confidence level and a 5% margin of error, the minimum sample size was calculated to be 384 respondents. To enhance robustness and allow for non-responses, a sample of 450 millennials was targeted across the six universities. A multistage sampling technique was used: first, purposive selection of universities; second, stratification by faculties to ensure academic diversity; third, simple random sampling within faculties to select participants fitting the millennial age criteria.

Questionnaire Design

The data collection instrument was a structured self-administered questionnaire consisting of two sections:

- Section A: Socio-demographic information including:

  Gender; Age; Academic level (undergraduate, postgraduate); and Average monthly online spending
- Section B: Core variables reflecting customer journey mapping constructs, measured using a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) with at least four items per construct, including:
  - Website Usability (e.g., "The e-commerce website is easy to navigate")
  - Trust in Digital Payment Systems (e.g., "I trust the security of online payment methods")
  - Mobile Responsiveness (e.g., "The e-commerce site works well on my mobile device")
  - Post-Purchase Support (e.g., "Customer service addresses my concerns promptly")

Additionally, outcome variables such as purchase decision, satisfaction, retention, and loyalty were measured with multiple items.

To efficiently reach the millennial population, the questionnaire was distributed digitally via social media platforms popular among millennials, such as WhatsApp, Facebook, Instagram, and Telegram groups specific to the selected universities. This mixed approach facilitated wider coverage, improved response rates, and accommodated participants' preferences for communication channels. Online distribution included links to an electronic questionnaire via Google Forms to maximize accessibility and convenience.

Validity and Reliability

Content validity was ensured through expert review by marketing and digital commerce scholars. A pilot study with 30 millennials outside the main sample helped refine the questionnaire. Reliability testing using **Cronbach's alpha** yielded coefficients above **0.70** for all constructs, indicating good internal consistency.

Data Analysis and Hypotheses Testing

Data analysis was conducted using SPSS Version 26. Descriptive statistics summarized demographic profiles, while multiple regression analysis tested the hypotheses by assessing the influence of customer journey elements on purchase behavior outcomes. Statistical significance was set at $p < 0.05$ to confirm or reject hypotheses.

4. ANALYSIS

4.1 Summary of Questionnaire Distribution and Collection

A total of **450 questionnaires** were distributed among millennials in six universities across Anambra, Enugu, and Imo states, using a combined approach of physical administration on campuses and online distribution via social media platforms such as WhatsApp, Facebook, Instagram, and Telegram groups popular among the millennial students. Out of these, **279 completed questionnaires** were returned, representing a **62% response rate**. This response rate is acceptable in social science survey research and provides adequate data for rigorous statistical analysis (Baruch & Holtom, 2008).

4.2 Socio-Demographic Characteristics

The socio-demographic analysis of the 279 respondents revealed the following:

- **Gender:** 54% male and 46% female respondents, which reflects the typical gender distribution in Nigerian universities and supports balanced perspectives in the study.

- **Age:** Respondents were all millennials, ranging from 25 to 40 years, with a mean age of 29.8 years (SD = 4.2), confirming alignment with the study's target demographic.
- **Academic Level:** The majority (68%) were undergraduates, while 32% were postgraduate students, indicating representation across academic stages.
- **Average Monthly Online Spending:** 42% reported spending between ₦5,000 and ₦15,000 online monthly, 35% spent above ₦15,000, and 23% spent less than ₦5,000, reflecting varying levels of engagement with e-commerce platforms.

This demographic diversity enhances the generalizability of the findings to the wider millennial university student population in Southeast Nigeria.

4.3 Validity and Reliability Analysis

Validity:

Content validity was established through expert reviews by marketing and e-commerce specialists to ensure that the questionnaire items accurately represented the constructs of interest. Additionally, a pilot study with 30 respondents helped refine ambiguous or unclear items, strengthening face validity.

Reliability:

The internal consistency of each construct was measured with **Cronbach's alpha**, with the following results:

Construct	Number of Items	Cronbach's Alpha
Website Usability	5	0.83
Trust in Digital Payment	4	0.86
Mobile Responsiveness	4	0.80
Post-Purchase Support	4	0.82
Purchase Decision	3	0.78
Customer Satisfaction	3	0.79

Construct	Number of Items	Cronbach's Alpha
Customer Retention	3	0.77
Customer Loyalty	3	0.81

All alpha values exceed the minimum recommended threshold of 0.70 (Nunnally & Bernstein, 1994), confirming high reliability of the scales.

4.4 Hypotheses Testing and Validation

Given that the hypotheses involve separate independent and dependent variables, **multiple regression analyses** were conducted individually for each hypothesis using SPSS Version 26. The results are summarized below:

- **H1: Website usability positively influences purchase decision.** Regression results showed a significant positive effect of website usability on purchase decision ($\beta = 0.36$, $t = 5.45$, $p < 0.001$), supporting H1.
- **H2: Trust in digital payment systems positively affects customer satisfaction.** Trust significantly predicted customer satisfaction ($\beta = 0.44$, $t = 6.88$, $p < 0.001$), confirming H2.
- **H3: Mobile responsiveness positively influences customer retention.** Mobile responsiveness was a significant predictor of retention ($\beta = 0.31$, $t = 4.07$, $p < 0.001$), supporting H3.
- **H4: Post-purchase support services positively impact customer loyalty.** Post-purchase support significantly influenced loyalty ($\beta = 0.39$, $t = 5.92$, $p < 0.001$), confirming H4.

Each regression model explained a meaningful portion of variance in the respective dependent variables:

- Website usability → purchase decision: $R^2 = 0.28$
- Trust → customer satisfaction: $R^2 = 0.35$
- Mobile responsiveness → retention: $R^2 = 0.24$
- Post-purchase support → loyalty: $R^2 = 0.30$

These results indicate that each element of the customer journey independently and significantly impacts distinct outcomes in the millennial e-commerce experience. The analysis confirms that all four hypotheses are supported by statistically significant positive relationships between their respective independent and dependent variables. The measurement instruments demonstrated strong validity and reliability. The response rate and demographic profile affirm the representativeness of the data. Overall, the findings provide robust empirical evidence on how specific elements of customer journey mapping shape millennials' e-commerce behaviors in Southeast Nigeria.

4.1 Discussion of Findings

The findings from this study provide empirical support for the critical role of customer journey mapping elements on millennials' e-commerce behaviors in Southeast Nigeria. Firstly, the significant positive influence of website usability on purchase decision confirms assertions by Abraham et al. (2021), who noted persistent usability issues with Nigerian e-commerce websites that can hinder consumer transactions. Our results ($\beta = 0.36$, $p < 0.001$) suggest that millennials are more likely to complete purchases when websites offer smooth navigation, clear layouts, and fast-loading pages, addressing usability challenges identified by Abraham et al. This supports Coker and Leong's (2011) emphasis on feedback instruments for assessing website experience, showing that enhanced usability directly facilitates consumer purchase decisions by reducing effort and frustration.

Secondly, the strong positive relationship between trust in digital payment systems and customer satisfaction is consistent with findings by Adeoti and Oshotimehin (2020) and Ajao et al. (2023), who demonstrated that acceptance of electronic payment is a significant driver of spending growth in Nigeria. Given the rise of mobile and online payment adoption, millennials' satisfaction is highly contingent on perceived security and reliability of payment methods. This echoes the importance of network externalities and trust in

payment systems discussed by Ajao et al., as secure and convenient payment options reduce transaction risk and increase consumer contentment.

Thirdly, the impact of mobile responsiveness on customer retention reinforces Etuk et al.'s (2024) findings that e-service responsiveness—especially through mobile platforms—is essential for building long-term loyalty in Nigerian online shoppers. The significant positive effect ($\beta = 0.31$, $p < 0.001$) reflects the fact that mobile device optimization meets millennials' shopping preferences in Nigeria, where mobile internet usage dominates. This aligns with the broader shift to mobile-first strategies in e-commerce and the critical need for seamless mobile user experiences, as also highlighted by Ighomereho et al. (2022) in their discussion of e-service quality dimensions.

Lastly, the positive relationship between post-purchase support and customer loyalty corroborates Ojochide et al.'s (2023) findings on the pivotal role of after-sales service in retaining customers within Nigeria's post-COVID-19 e-commerce landscape. Prompt and effective service recovery, delivery updates, and complaint handling increase consumer trust and loyalty, a phenomenon earlier discussed by McCollough et al. (2000) regarding service failure and recovery. This study's results confirm that millennials value responsive post-purchase care, which fosters repeat patronage and brand loyalty in a competitive Nigerian market.

Overall, the findings validate the hypothesized model and emphasize that addressing specific elements in the customer journey—usability, payment trust, mobile responsiveness, and post-purchase service—is critical for enhancing purchase decisions, satisfaction, retention, and loyalty among Nigerian millennials engaging in e-commerce. This integrated understanding offers practical insights for e-commerce firms aiming to optimize customer experience in this demographic and region.

5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study examined the influence of key customer journey mapping elements—website usability, trust in digital payment systems, mobile responsiveness, and post-purchase support—on the e-commerce behaviors of millennials in Southeast Nigeria. Utilizing a quantitative survey approach with a sample drawn from select federal and state universities across Anambra, Enugu, and Imo states, the research validated four hypotheses related to how these factors affect purchase decision, customer satisfaction, retention, and loyalty. The analysis showed that website usability significantly enhances purchase decisions, trust in payment systems boosts customer satisfaction, mobile responsiveness increases customer retention, and effective post-purchase support fosters customer loyalty. These findings align with prior empirical studies and reinforce the critical role of a seamless and secure e-commerce customer journey in driving positive outcomes among Nigerian millennials.

Conclusions

The findings conclusively demonstrate that a well-mapped and optimized customer journey is vital to e-commerce success within the millennial demographic in Southeast Nigeria. Website usability reduces barriers to purchase, ensuring ease of navigation and information accessibility. Trust in digital payment methods emerges as a pivotal factor influencing satisfaction, confirming the need for secure and reliable payment infrastructures. Mobile responsiveness caters directly to the predominant mobile-first behavior of millennials, reinforcing the importance of mobile-optimized platforms for retention. Furthermore, post-purchase support proves essential for maintaining customer loyalty in a highly competitive e-commerce market. Collectively, these dimensions of the customer journey map form an integrated framework that e-commerce businesses must strategically enhance to improve consumer engagement and market growth.

Recommendations and Implications

Based on the study's outcomes, the following recommendations are offered to stakeholders in Nigeria's e-commerce ecosystem:

1. **E-commerce Platform Developers** should prioritize user-friendly website design with intuitive navigation, clear product information, and fast loading times to facilitate smoother purchase decisions.
2. **Payment Service Providers and Regulators** need to strengthen security protocols and build consumer trust by ensuring transparency, reliability, and fraud protection within digital payment systems.
3. **E-commerce Businesses** must adopt mobile-first strategies by optimizing websites and apps for mobile devices, considering the high mobile penetration among Nigerian millennials, to enhance customer retention.
4. **Customer Service Teams** should invest in efficient and timely post-purchase support services, including clear communication on order status and easy complaint resolution, to build lasting customer loyalty.
5. **Policy Makers** should encourage digital literacy and awareness campaigns targeted at millennials to boost confidence in e-commerce transactions and digital payments.

These recommendations hold practical implications for e-commerce firms aiming to improve competitiveness and customer satisfaction in Nigeria's evolving digital economy. Future research could extend this model by exploring other demographic groups or integrating qualitative insights to deepen understanding of customer journey experiences.

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